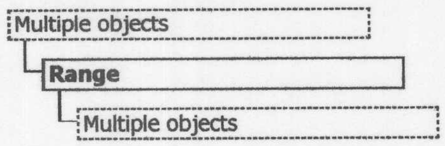
Active Cell . collect

Range Collection

See Also Properties Methods Events



Represents a cell, a row, a column, a selection of cells containing one or more contiguous blocks of cells, or a 3-D range.

Using the Range Collection

The following properties and methods for returning a **Range** object are described in this section:

- **Range** property
- **Cells** property
- **Range** and **Cells**
- **Offset** property
- **Union** method

Range Property

Use **Range(***arg***)**, where *arg* names the range, to return a **Range** object that represents a single cell or a range of cells. The following example places the value of cell A1 in cell A5.

```
Worksheets("Sheet1").Range("A5").Value = _
    Worksheets("Sheet1").Range("A1").Value
```

The following example fills the range A1:H8 with random numbers by setting the formula for each cell in the range. When it's used without an object qualifier (an object to the left of the period), the **Range** property returns a range on the active sheet. If the active sheet isn't a worksheet, the method fails. Use the Activate method to activate a worksheet before you use the **Range** property without an explicit object qualifier.

```
Worksheets("Sheet1").Activate
Range("A1:H8").Formula = "=Rand()"    'Range is on the active sheet
```

The following example clears the contents of the range named Criteria.

```
Worksheets(1).Range("Criteria").ClearContents
```

If you use a text argument for the range address, you must specify the address in A1-style notation (you cannot use R1C1-style notation).

Cells Property

Use **Cells(***row*, *column***)** where *row* is the row index and *column* is the column index, to return a single cell. The following example sets the value of cell A1 to 24.

```
Worksheets(1).Cells(1, 1).Value = 24
```

The following example sets the formula for cell A2.

```
ActiveSheet.Cells(2, 1).Formula = "=Sum(B1:B5)"
```

Although you can also use `Range("A1")` to return cell A1, there may be times when the **Cells** property is more convenient because you can use a variable for the row or column. The following example creates column and row headings on Sheet1. Notice that after the worksheet has been activated, the **Cells** property can be used without an explicit sheet declaration (it returns a cell on the active sheet).

```
Sub SetUpTable()
Worksheets("Sheet1").Activate
For TheYear = 1 To 5
    Cells(1, TheYear + 1).Value = 1990 + TheYear
Next TheYear
For TheQuarter = 1 To 4
    Cells(TheQuarter + 1, 1).Value = "Q" & TheQuarter
Next TheQuarter
End Sub
```

Although you could use Visual Basic string functions to alter A1-style references, it's much easier (and much better programming practice) to use the `Cells(1, 1)` notation.

Use *expression*.**Cells(***row, column***)** , where *expression* is an expression that returns a **Range** object, and *row* and *column* are relative to the upper-left corner of the range, to return part of a range. The following example sets the formula for cell C5.

```
Worksheets(1).Range("C5:C10").Cells(1, 1).Formula = "=Rand()"
```

Range and Cells

Use **Range(***cell1, cell2***)**, where *cell1* and *cell2* are **Range** objects that specify the start and end cells, to return a **Range** object. The following example sets the border line style for cells A1:J10.

```
With Worksheets(1)
    .Range(.Cells(1, 1), _
        .Cells(10, 10)).Borders.LineStyle = xlThick
End With
```

Notice the period in front of each occurrence of the **Cells** property. The period is required if the result of the preceding **With** statement is to be applied to the **Cells** property — in this case, to indicate that the cells are on worksheet one (without the period, the **Cells** property would return cells on the active sheet).

Offset Property

Use **Offset(***row, column***)**, where *row* and *column* are the row and column offsets, to return a range at a specified offset to another range. The following example selects the cell three rows down from and one column to the right of the cell in the upper-left corner of the current selection. You cannot select a cell that isn't on the active sheet, so you must first activate the worksheet.

```
Worksheets("Sheet1").Activate
  'Can't select unless the sheet is active
Selection.Offset(3, 1).Range("A1").Select
```

Union Method

Use **Union(***range1, range2, ...***)** to return multiple-area ranges — that is, ranges composed of two or more contiguous blocks of cells. The following example creates an object defined as the union of ranges A1:B2 and C3:D4, and then selects the defined range.

```
Dim r1 As Range, r2 As Range, myMultiAreaRange As Range
Worksheets("sheet1").Activate
Set r1 = Range("A1:B2")
Set r2 = Range("C3:D4")
Set myMultiAreaRange = Union(r1, r2)
myMultiAreaRange.Select
```

If you work with selections that contain more than one area, the **Areas** property is very useful. It divides a multiple-area selection into individual **Range** objects and then returns the objects as a collection. You can use the **Count** property on the returned collection to check for a selection that contains more than one area, as shown in the following example.

```
Sub NoMultiAreaSelection()
    NumberOfSelectedAreas = Selection.Areas.Count
    If NumberOfSelectedAreas > 1 Then
        MsgBox "You cannot carry out this command " & _
            "on multi-area selections"
    End If
End Sub
```